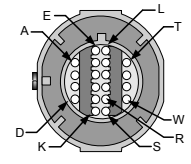
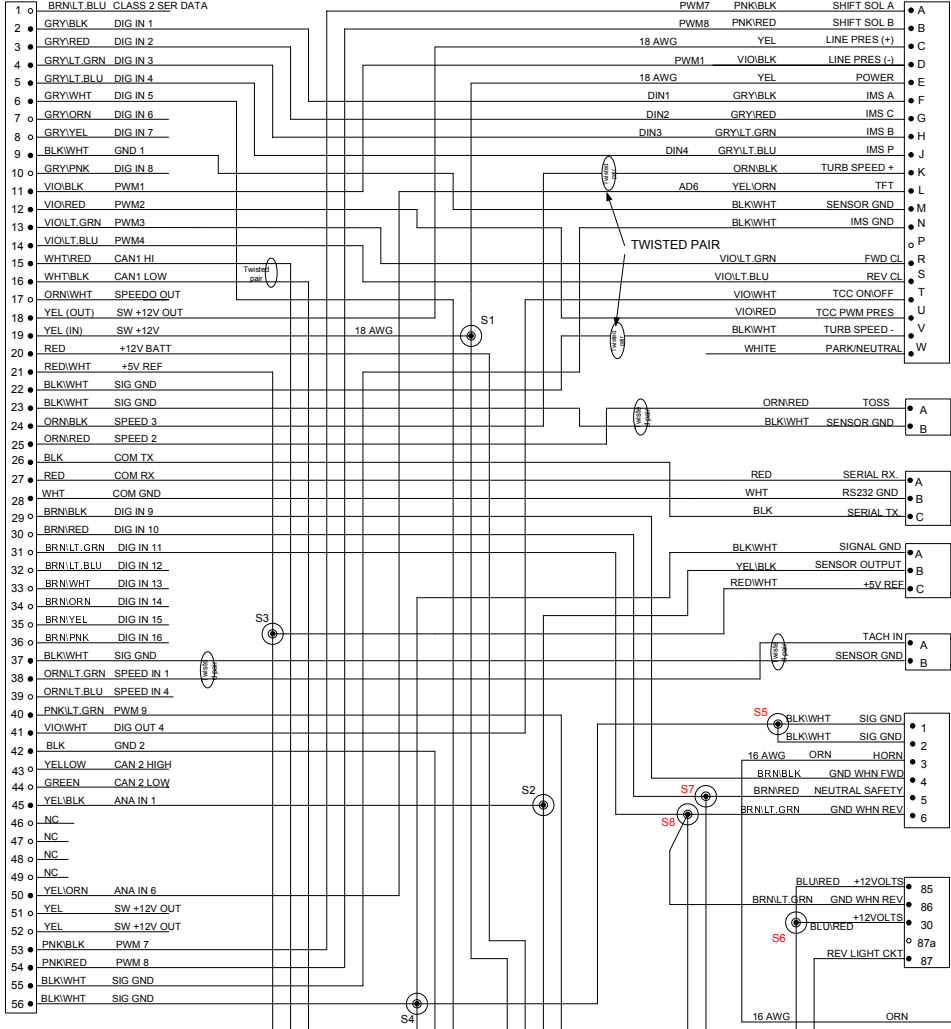


TCM-2600



C-1 TRANSMISSION CONNECTOR FRONT VIEW

23.5"



C-2 OUTPUT SHAFT SPEED SENSOR FRONT VIEW



C-3 OPTIONAL COM NOT REQUIRED FOR USE FRONT VIEW



C-4 MAP CONNECTOR FRONT VIEW



C-5 RPM CONNECTOR FRONT VIEW

1 2 SOME CONNECTORS ARE NUMBERED NOT LETTERED

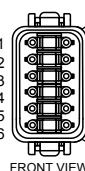


C7 SHIFTER CONNECTOR FRONT VIEW



RY1 CONNECTOR FRONT VIEW (CONNECTOR NOT RELAY)

PIGTAIL FOLLOWS HARNESS AND EXITS AT C7 LOCATION (SEE NEXT PAGE)



C-6 BULKHEAD CONNECTOR FRONT VIEW

REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	Release	5/27/15	FD	
1A	CORRECT C4 CON #	9/15/15	FD	
1B	DRAWING # CORRECTED FROM 4641 TO 4660	8/4/16	FD	
2A	DRAWING # CORRECTED FROM 4641 TO 4661 (new shifter con)	12/1/16	FD	
2B	ADDED TRN-1200 SWITCHING DETAIL	1/28/16	FD	
2C	CORRECT PAGE 7 PRODUCTION REMOVE #5 LINE	1/28/16	FD	
2D	ADD 20AWG NEUTRAL SAFETY WIRE TO PIGTAIL	8/9/17	FD	

C-1 TRANSMISSION CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-2000	
14	TERMINAL	CON 2804	20-22 AWG.
2	TERMINAL	CON-2805	16-18 AWG
5	BLOCKING PINS	CON-1044	BLUE
1	SEAL	CON-3309	LT.GREEN
1	CONDUIT CLIP	CON-2008	
1	TPA	CON-2003	GRY

C-2 OUTPUT SHAFT SPEED SENSOR FEMALE			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1070	
2	TERMINALS	CON-1084	20 AWG
2	CABLE SEAL	CON-1093	GRN
1	TPA	CON-1072	GRY

C-3 OPTIONAL COM NOT REQUIRED FOR USE			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-3416	
3	TERMINALS	CON-1038	
1	TPA	CON-3417	CREAM
3	CABLE SEALS	CON-1027	WHT

C-3A CAP LAPTOP CALIBRATION CONNECT CAP			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-3415	
3	CAVITY PLUG	CON-1029	GRN
1	TPA	CON-3417	

PROVIDE A LAPTOP CALIBRATION CONNECT PROTECTIVE CAP

C-4 1 BAR MAP SENSOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2303	GREEN BODY
2	TERMINALS	CON-1006	
3	CABLE SEAL	CON-1004	

C5 RPM CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON-1071	F
2	PIN	CON-1088	M
1	SEAL	CON-1093	GRN
1	LOCK	CON-1072	3/5/2013

C7 START/BACKUP CIRCUIT CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5520	M/F
4	TERMINALS	CON-5504	
1	WEDGE LOCK	CON-5521	
1	CAVITY PLUG	CON5530	

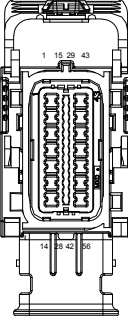
RY1 REV LIGHT RELAY			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-2502	
1	RELAY	CON-2501	
4	TERMINAL	CON-2503	

C-6 BULKHEAD CONNECTOR			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-5542	GRY
12	TERMINALS	CON-5504	
1	WEDGE	CON-5508	GRN

Print Date
6/21/2017
1700

APPLICABLE STANDARDS	
• ASME Y14.100-200	2) WIRE GAUGES 28 AWG
• ASME Y14.5M-1994	3) WIRE ALUMINUM
• IPC/WHMA-A-620A	4) WIRE NICKEL/STEEL
• CLASS 2	5) FOOT 1/2" (3.175mm)
• MARKING MIL-STD-130	6) TERMINAL CONDUCTOR PLUG
	7) TERMINAL CONDUCTOR PLUG
	8) TERMINAL CONDUCTOR PLUG
	9) TERMINAL CONDUCTOR PLUG
	10) TERMINAL CONDUCTOR PLUG
	11) TERMINAL CONDUCTOR PLUG
	12) TERMINAL CONDUCTOR PLUG

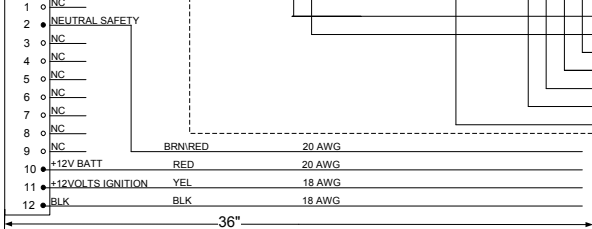
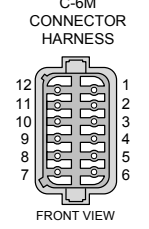
COMPANY	
POWERTRAIN CONTROL SOLUTIONS	
TITLE	GM 4 SPEED TRANSMISSION C6 REPLACEMENT [AA]
DATE	7/21/16
DESIGNER	XXXXXXXXXX
APPROVED BY	XXXXX
DATE	7/21/16
PCB PART NUMBER	TCM-4661
REV	002
SHEET	2 OF 10



TCU-2600

TCU-2600 Connector			
QTY	DESCRIPTION	PCS P/N	NOTES
1	CONNECTOR	CON-1202	M/F
34	TERMINALS	CON-1205	
1	CONNECTOR COVER	CON-1203	
21	CAVITY PLUG	CON-1204	

C-6M CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON5543	
3	TERMINALS	CON5510	
1	WEDGE	CON5544	



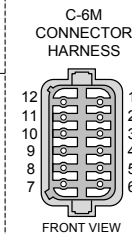
LOOM DEFINITION TABLE			
LOCATION	DISCUPTION	LENGTH	PART#
LOOM1	3/4" BLACK CONVOLUTED LOOM	6.5"	WRE-3005
LOOM2	1/2" BLACK CONVOLUTED LOOM	17.5"	WRE-3003
LOOM3	1/4" BLACK CONVOLUTED LOOM	17.5"	WRE-3000
LOOM4	1/2" BLACK CONVOLUTED LOOM	32"	WRE-3003
LOOM5	1/4" BLACK CONVOLUTED LOOM	8"	WRE-3000
LOOM6	1/4" BLACK CONVOLUTED LOOM	4"	WRE-3000
LOOM7	1/4" BLACK CONVOLUTED LOOM	4"	WRE-3000
LOOM8	3/8" BLACK CONVOLUTED LOOM	9"	WRE-3001
LOOM9	3/8" BLACK CONVOLUTED LOOM	45"	WRE-3001

LABEL DEFINITION TABLE			
NUM	NAME	PART #	NOTES
L1	TCM-4661-002 4170E 2010+ TO	WRE-8501	P377
L2	TRANSMISSION CONNECTOR	WRE-8500	P107
L3	TOSS	WRE-8500	P8
L4	BULKHEAD CONNECTOR	WRE-8500	P64
L5	OPTIONAL COM NOT REQUIRED FOR USE	WRE-8500	P4
L6	RPM CONNECTOR	WRE-8500	P304
L7	1 BAR MAP SENSOR	WRE-8500	P305
L8	RY1 REV LIGHT RELAY	WRE-8500	P278
L9	SHIFTER CONNECTOR	WRE-8500	P376

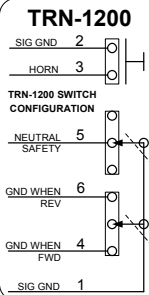
SPLICE INFORMATION		
S#	FUNCTION	COLOR
S1	12 VOLTS SWITCHED	YEL
S2	TPS/MAP SIGNAL	YEL/BLK
S3	+5V SENSOR	RED/WHT
S4	SIGNAL GND	BLK/WHT

C-3 CAP LAPTOP CALIBRATION CONNECT CAP			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	12129615	
3	CAVITY PLUG	12059168	DK_RED
1	SECONDARY LOCK	12052845	
1	PIN BLOCKING PLUG		

C-6M CONNECTOR			
QTY	DESCRIPTION	PIN	NOTES
1	CONNECTOR	CON5543	
3	TERMINALS	CON5510	
1	WEDGE	CON5544	



REVISION HISTORY				
LEVEL	DESCRIPTION	DATE	DRN	APP
1	Release	5/27/15	FD	
1A	CORRECT C4 CON #	9/15/15	FD	
1B	DRAWING # CORRECTED FROM 4641 TO 4660	8/4/16	FD	
2A	DRAWING # CORRECTED FROM 4641 TO 4661 [new shifter con]	12/1/16	FD	
2B	ADDED TRN-1200 SWITCHING DETAIL	1/26/16	FD	
2C	CORRECT PAGE 7 PRODUCTION REMOVE #5 LINE	1/26/16	FD	
2D	ADD 20AWG NEUTRAL SAFETY WIRE TO PIGTAIL	8/9/17	FD	



C3 OPTIONAL COM NOT REQUIRED FOR USE			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	SERIAL RX	RED	TCU-27
B	SIGNAL GND	WHT	TCU-28
C	SERIAL TX	BLK	TCU-26

APPLICABLE STANDARDS

- ASME Y14.100-200
- ASME Y14.5M-1994
- IPC/WHMA-A-620A-CLASS 2
- MARK IAW MIL-STD-130.

NOTES

- 1) WIRE LENGTH TOLERANCE +/- 1/32 INCH
- 2) WIRE GAUGE IS 20 AWG UNLESS OTHERWISE STATED
- 3) TAPE ALL LOOM JOINTS UNLESS OTHERWISE STATED
- 4) TWIST INDICATED WIRES AT LEAST 10-12 TURNS PER FOOT
- 5) PLACE TAGS NO MORE THAN 2" FROM CONNECTOR. PLACE TAGS FOR UNTERMINATED WIRES NO MORE THAN 2" FROM UNTERMINATED END.
- 6) WIRE TYPE IS TX UNLESS OTHERWISE STATED

DRAWN BY: FRED D. DATE: 7/2/16

C1 TRANSMISSION CONNECTOR 2600 TO 4170 STAND ALONE			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SHIFT SOL-A (1-2)	PNK/BLK	TCU-53
B	SHIFT SOL B-(2-3)	PNK/RED	TCU-54
C	LINE PRESSURE +	YEL (18 AWG)	TCU-18
D	LINE PRESSURE -	VIO/BLK	TCU-11
E	TCC, 1-2, 2-3, 3-2 +	YEL (18 AWG)	TCU-19, S1
F	IMS A	GRY/BLK	TCU-2
G	IMS C	GRY/RED	TCU-3
H	IMSB	GRY/GRN	TCU-4
J	IMS P	GRY/LT.BLU	TCU-5
K	TURBINE SPEED +	ORG/BLK	TCU-24
L	ATF TEMP +	YEL/ORG	TCU-50
M	ATF TEMP -	BLK/WHT	TCU-9
N	IMS GND	BLK/WHT	TCU-55
P	NC	NC	NC
R	FWD CL	VIO/LT.GRN	TCU-13
S	REV CL	VIO/LT.BLU	TCU-14
T	TCC ON/OFF	VIO/WHT	TCU-41
U	TCC PWM	VIO/RED	TCU-12
V	TURBIN SPEED -	BLK/WHT	TCU-22
W	PIN	????	C1-W

C-7 Shifter Connector			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
1	SIGNAL GND	BLK/WHT	TCU-56, S2, S5
2	SIGNAL GND	BLK/WHT	TCU-56, S2, S5
3	HORN	ORANGE	TO UNTERM
4	GND WHEN FWD	BRN/BLK	TCU-29
5	NEUTRAL SAFETY	BRN/RED	TCU-30, S3, C6-2
6	GND WHEN REV	BRN/LT.GRN	TCU-31, S4, C6-3

RY1 REV LIGHT RELAY			
PIN	CIRCUIT FUNCTION	COLOR	GOES TO
30	+12V POWER	BLU/RED	UNTERM RY1-85, S6 18 AWG
87	REV LIGHT CKT	YEL	UNTERM
85	+12V	BLU/RED	UNTERM RY1-30, S6
86	GND WHN REV	BRN/LT.GRN	C7-6, S8, TCU-30

C4 1 BAR MAP SENSOR CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	CONNECTS TO
A	SIGNAL GND	BLK/WHT	S4, TCU-56
B	SENSOR OUTPUT	YEL/RED	S2, TCU-45
C	+5V REF	RED/WHT	S3, TCU-21

C2 OUTPUT SHAFT SPEED SENSOR FEMALE			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TOSS+	ORG/RED	25
B	TOSS-	BLK/WHT	23

C5 RPM CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	TCU POS.
A	TACH IN	ORG/LT.GRN	38
B	SENSOR GND	BLK/WHT	37

C6 BULKHEAD CONNECTOR			
PIN	CIRCUIT FUNCTION	COLOR	GOES TO
1	CAN1 L	WHT/BLK	TCU-16
2	PIN	WHITE	C1-W
3	NC	NC	NC
4	SEN GND	BLK/WHT	TCU-56
5	DIG IN -5	GRY/WHT	TCU-6
6	+5V SEN	RED/WHT	TCU-21
7	CAN1 H	WHT/RED	TCU-15
8	CHECK TRANS	PNK/LT.GRN	TCU-40
9	TPS	YEL/BLK	TCU-45
10	+12V BATTERY	RED	TCU-20
11	+12 VOLTS IGNITION	YEL	TCU-19,S1
12	CHASSIS GND	BLK	TCU-42

Print Date
6/21/2017
1700

COMPANY:
POWERTRAIN CONTROL SOLUTIONS

TITLE:
GM 4 SPEED TRANSMISSION C6 REPLACEMENT [AA]

SIZE: C CUSTOMER DRAWING NO: XXXXX-XXXXX PCS PART NUMBER: TCM-4661 REV: 002

DRAWN BY: FRED D. DATE: 7/2/16 APPROVED BY: XXXXX DATE: SHEET 3 OF 10